

a1  
cont.

lift-off and design lift areas  $A_2$ ,  $A_1$ , as can be seen from Fig. 7, are such that their centers are coincident. Thus, the lift centre  $C_{p2}$  at lift-off is coincident with the lift centre  $C_{p1}$  at design speed. It will be noted that the lift Area  $A_2$  at lift-off in the hull of Fig. 7 is generally more U-shaped than V-shaped, having a thick forward portion P and two rearwardly extending leg portions Q,R. In the hull 1 of Figs. 5, 6 and 7, the lift centre  $C_p$  remains vertically aligned with the center of gravity  $C_g$  at both lift-off and design conditions. The angle of incidence  $\alpha_{12}$  is greater than  $\alpha_{11}$  so as to provide an increased lift coefficient but the attitude of hull 1 remains sensibly unchanged.

The thrust T is virtually aligned with the centre of pressure  $C_p$  about which it provides little moment.

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Page 14, line 3:

a2

The fin 50 is configured such that its own centre of gravity is vertically aligned with its ~~own hydrodynamic lift~~ centre of lateral pressure is aligned with the centre of gravity of the craft. The fin 50 operates at low slip angle and creates very little drag in turning maneuvers. The fin also operates at low drift angles and will only minimally influence the flow to the propellers. The fin 50 is also retractable so that it can be retracted when not required.

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**IN THE DRAWINGS:**

Please amend Figs. 1-5 and 9 in accordance with the attached marked prints.

**IN THE CLAIMS:**

Please amend the claims as follows:

a3

1. (Concurrently Amended) A hull (+) for a water craft, wherein the center of gravity ( $C_g$ ) of the hull is substantially vertically aligned with the center of hydrodynamic lift ( $C_p$ ) of a lifting surface of the hull, both at lift-off speed and at design speed; characterized in that the aspect ration ~~( $S_2/A$ )~~ ( $S_1^2/A_1$ ) of the wetted hull (+) at design speed is in the range of 2.5 to 5.0.